#### February, 2007

# Pediatrics of Parents

The newsletter for people who care for children

Richard J. Sagall, MD, Editor

In this Issue
Why Ear Infections Don't Get Better1
Flat Feet Overdiagnosed.1
School Bus Injuries2
Asthma and Antibiotics2
Ultrasound Dangers3
Latex in Food Packaging3
Childhood Lead Poisoning Prevention4
Aaron has Asthma6
Infant Carseat Safety Update7
Cheerleading Dangers7
Discussing Drugs8
Parents Pack on the Pounds9
Use of Infant Seats10
Fluoride Recommendations 11

## Why Ear Infections Don't Get Better

It should be simple. Your child has an ear infection (otitis media), the doctor prescribes an antibiotic, and the child gets better. Unfortunately, it doesn't always work that way. One reason is that both viruses and bacteria can cause ear infections, but only bacteria respond to antibiotics. There's no way for a doctor to determine in the office if a virus or a bacteria is causing the infection. To add another level of complexity, many cases of otitis media are associated with both viruses and bacteria.

Researchers at the University of Texas Medical Branch, Galveston, analyzed the middle ear fluid of 79 children with ear infections. All the children had a history of many ear infections and had tympanostomy tubes (tubes in their eardrums). The fluid samples were obtained through the tympanostomy tubes.

Bacteria were found in 73 (92%) of the samples, 55 (70%) of the samples contained one or more viruses, and both were found in 52 (66%) of the samples. Another way to look at the results is that 21 (27%) of the samples grew only bacteria, three (4%) grew only viruses, another three grew nothing, and 52 (66%) grew both bacteria and viruses. Six different bacteria were found among the 79 samples. Ten had two or more different bacteria.

These findings help explain why antibiotics don't always work when your child has an ear infection, or why your child may start to get better when on an antibiotic and then seem to regress as the ear pain and fever return.

Clinical of Infectious Diseases, 12/01/06

## Flat Feet Overdiagnosed

Many children treated for flat foot shouldn't be. That's the finding of an Austrian study of 835 children three to six years old. Forty-four percent of the 411 girls and 424 boys were diagnosed with "flexible flat foot." That may seem like a lot of children, but it's important to understand there are two types of flat feet.

The most common type of flat foot, and the type that over 99% of these children had, is "flexible flat foot" (FFF). Children with FFF have flexibility in their feet. When they stand, the arch of their foot disappears and the bottom of the foot appears flat. The arch reappears when their big toe is raised or when they are off their feet. FFF is painless.

The other type of flat footedness, "rigid flat feet" (RFF), is more serious. The feet of these children are rigid and less flexible, the arch doesn't reappear

Distracting TV .....12

as in FFF, and their feet may be painful. These children benefit from arch supports.

Interestingly, the number of children with flat foot declines with age. This study found 54% of three year olds showed at least one flat foot. The percentage dropped to 24% for the six year olds. Over 99% of all the children diagnosed with flat feet had the flexible type. Yet, 10% of all the children diagnosed with flat foot had arch supports – a treatment needed only in children with RFF.

Many orthopedists believe the best treatment for children with any type of flat footedness is sneakers with flexible soles. Since arch supports are uncomfortable and sometimes difficult to use properly, it's best to avoid them unless diagnosed with RFF. Arch supports, when not needed, may actually interfere with proper foot development.

There are three symptoms that indicate you should have your flat-footed child seen by a doctor:

- No arch when the child sits or stands on tiptoes
- Persistent pain around the arch of the foot
- Frequent toe walking, often due to foot pain

Pediatrics, 08/06

## School Bus Injuries

From 2001 to 2003 there were 51,100 school bus-related injuries severe enough to require treatment in an emergency room. The good news is that 97% of the children were treated and released from the hospital. Forty-three percent of the children injured were 10-14 years old. The data analysis revealed that:

- 43% of the injuries were due to motor vehicle crashes
- 24% of the injuries occurred as the child was boarding, alighting, or approaching the bus
- 52% of all injuries to children under 10 years old were head injuries
- 26% of all injuries to children 10-19 years old were of the legs

According to Jennifer McGeehan, MPH, the lead author of the study, "This study identified a much greater annual number of school bus-related injuries to children than reported previously." Further investigation is needed to determine what changes are necessary to better protect children riding school buses.

Pediatrics, 11/06

### Asthma and Antibiotics

Children during their first year of life are prescribed antibiotics for many reasons, primarily ear infections and respiratory infections. Many of these illnesses turn out to be viral in nature, and so the antibiotics are unnecessary. Now there may be another reason to avoid antibiotics.

Researchers at the University of British Columbia examined studies of data from more than 12,000 children and 1,800 asthma cases and found that children who took at least once course of antibiotics when they were under one year old were more than twice as likely to develop asthma as children who never took antibiotics. When they analyzed the effect of the number of courses of antibiotics a child took on that child's developing asthma ("dose-response"), they examined studies of data from more than 27,000 children and 3,300 asthma cases and found that each additional course of antibiotics increased the odds for developing asthma by 16%. The researchers used prospective and retrospective studies that were published in Englishlanguage literature from the past thirty years.

"It appears that it is certainly possible that there is an association between early antibiotic use and subsequent asthma," said Carlo A. Marra, PharmD, PhD, one of the researchers. However, he warned that "...you have to be careful not to over-interpret the findings... This is more evidence that there is a potential adverse event associated with (antibiotics), asthma being one of them. But can we say for certain antibiotics cause asthma? No we can't."

A relationship between antibiotics and asthma may exist, but we need more information to determine if if it's a true cause and effect relationship or just a temporal one (meaning two things occur, one before the other, but the first doesn't cause the second). Or perhaps there's a third factor that makes a child more susceptible to both asthma and infections that are treated with antibiotics.

One proposed explanation for this relationship is the "hygiene hypothesis." According to its advocates, children aren't exposed to many microbes, which leads to an over-sensitive immune system. In turn, a hypersensitive immune system responds excessively to common non-threatening agents such as pollen and dust mites. The result is an allergic reaction that, in some children, includes airway inflammation that's part of asthma.

Chest, 03/06

## Ultrasound Dangers

### By Susan Kralian, PhD

Obstetricians use ultrasound waves to generate 2- and 3-D images of fetuses in the womb, and these images allow them to answer important medical questions. Is the fetus in the correct location? How many fetuses are in the womb (one or several)? Are there birth defects, such as kidney or nervous system abnormalities?

In the past few years, commercial facilities have started to offer ultrasounds not for medical use but for entertainment, for parents to collect pictures and videos of the baby developing in the womb. New research suggests, however, that prolonged exposure to ultrasound waves while in the womb can impair normal brain development.

How does a normal brain develop? The following four steps summarize normal brain development:

- 1. Brain cells divide.
- 2. Many of the newly divided brain cells migrate (move and crawl) to new locations within the nervous system.
- 3. Once a brain cell has arrived at the new location, movement stops and the brain cell forms connections with neighboring brain cells.
- 4. Only brain cells with strong connections between other brain cells survive. Brain cells with weak connections die.

Would exposure to ultrasound waves while developing in the womb disrupt normal brain development? To answer this question, researchers treated pregnant mice with ultrasound waves for 5,15, 30, 60, 210, or 420 minutes. A few days after the pregnant mice gave birth to their offspring, researchers analyzed the brains of the baby mice. While the brains of mice exposed to ultrasound waves for brief lengths of time (5 and 15 minutes) were normal, the brains of mice exposed to ultrasound waves for longer lengths of time (30, 60, 210, or 420 minutes) were not normal. Researchers found that when mice were exposed to ultrasound waves for long time periods, some brain cells failed to migrate to the correct location within the brain. Further, the longer the exposure to ultrasound waves, the fewer brain cells migrated to the correct location.

What are the implications for disruption of brain cell migration? Prior research compared epileptic, schizophrenic, and even autistic brains to normal (non-disease state) brains. In some types of epilepsy, some brain cells never migrated. Compared to normal brains,

many schizophrenic and autistic brains had abnormalities in brain cell organization and arrangement. Based on these observations, researchers suggested that disruption of brain cell migration is the underlying cause of disorders such as epilepsy, autopsy, and schizophrenia.

Caution should be used before over-interpreting the results of these studies. During prenatal development, human brain cells migrate for 18 weeks while mice brain cells migrate for one week. Therefore, 30 minutes may not be as detrimental to humans given the longer time period for brain cell migration. Finally, the only way to demonstrate that ultrasound waves given in these time intervals may result in abnormalities such as epilepsy would be to conduct similar experiments with human subjects. However, as such experiments are unethical, mice are used as models.

In 2004, the FDA issued a warning against the use of ultrasound waves for non-medical purposes. These new studies further support the FDA's warning. Outside the medical office, babies in the womb should not be exposed to additional ultrasound waves merely for the collection of photos, as increasing the amount of time that the developing baby is exposed to ultrasound waves risks disrupting normal brain development.

Susan Kralian, PhD, is a former college professor, high school teacher, laboratory technician, and Peace Corps volunteer. She lives and works in New York, NY.

## Latex in Food Packaging

You may be getting more than you think with packaged foods. Researchers in Leatherhead, UK, analyzed the packaging from 21 different foods including fruits, vegetables, ice creams, meats, cheeses, pastries, and sweets. They found that one-third of the packaging contained latex allergens. This means that people allergic to latex may have a reaction when handling the packaging.

Ice cream wrappers topped the list with the most allergens. Some of the food products were found to have latex allergens in high enough levels to trigger an allergic reaction in a sensitive person.

Journal of the Science of Food and Agriculture, 09/06

## Childhood Lead Poisoning Prevention

## By Misha K. Walker, MPH and Mary Jean Brown, ScD

## Lead Poisoning Remains a Problem in the United States – But it is Preventable

Lead has no known value to the human body and can adversely affect nearly every body system. Because lead poisoning often occurs with no obvious symptoms, it frequently goes unrecognized. Therefore, many children with lead poisoning go undiagnosed and untreated.

Young children are particularly at risk for lead exposure because they have frequent hand-to-mouth activity and absorb lead more easily than do adults. Children's nervous systems are still undergoing development and thus are more susceptible to the effects of toxic agents. Lead is also harmful to the developing fetuses of pregnant women.

Low levels of lead can cause reduced intelligence and attention span, learning disabilities, and behavioral problems. Very high lead levels (blood lead levels  $70\mu g/dL$  or greater) can cause severe neurological problems such as coma, convulsions, and even death. Such levels are now rare in the United States.

No safe blood lead level in children has been determined. About 310,000 U.S. children aged 1-5 years have blood lead levels greater than  $10\mu g/dL$ , the level targeted for elimination by 2010.

#### What is Lead?

Lead is a naturally occurring, bluish-gray metal found in small amounts in the earth's crust. Lead contamination is widespread in the modern environment. Much of it comes from human activities including burning leaded gasoline, mining, and manufacturing. Lead is still used in many products today. It is used in batteries, ammunition, metal products (solder and pipes), and devices to shield x-rays. However, lead in paint is the main high-dose source of lead exposure to U.S. children today.

Lead was widely used in paint through the 1940s. That use declined during the 1950s and 1960s, and lead was banned from paint for residential use in 1978. Even so, lead remains a hazard in homes built before the ban, especially in pre-1950 housing. According to the U.S. Department of Housing and Urban Development, nearly 38 million housing units contain lead-based paint.

The most common sources of lead exposure for children are chips and particles of deteriorated lead paint.

Although children may be exposed to lead from paint directly by swallowing paint chips, they are more commonly exposed by ingesting house dust or soil contaminated by leaded paint. Lead paint chips become ground into tiny bits that become part of the dust and soil in and around homes. This usually occurs when leaded paint deteriorates or is subject to friction or abrasion (as on doors and windowsills and wells). In addition, lead can be dispersed when paint is disturbed during demolition, remodeling, paint removal, or preparation of painted surfaces for repainting.

Lead also may be found in other sources. These sources may be the exposure source for as many as 30% of lead-poisoned children in certain areas across the United States. They include:

- Traditional home health remedies such as azarcon and greta, which are used for upset stomach or indigestion, and paylooah, which is used for rash or fever
- Some imported candies (specifically those from Mexico)
- Imported toy jewelry
- Some imported cosmetics
- Pottery and ceramics
- Drinking water contaminated by lead leached from lead pipes, solder, brass fixtures, or valves
- Consumer products, including tea kettles and sidewalk chalk

Additionally, a variety of work and hobby activities and products expose adults to lead. This also can result in lead exposure for their families. Activities that are associated with lead exposure include indoor firing range use, home repairs and remodeling, and pottery making. "Take-home" exposures may result when people whose jobs expose them to lead wear their work clothes home or wash them with the family laundry. It also may result when they bring scrap or waste material home from work.

#### **Prevention Strategies**

The goal is to prevent lead exposure to children before they are harmed. There are many ways parents can reduce a child's exposure to lead. The key is stop children from coming into contact with lead. Lead hazards in a child's environment must be identified and controlled or removed safely.

Lead-based paint is the major source of exposure for lead in U.S. children. All houses built before 1978 are

likely to contain some lead-based paint. However, it is the deterioration of this paint that causes a problem. You should determine the construction year of the house or the dwelling where the child may spend a large amount of time (e.g., grandparents or daycare). In housing built before 1978, assume that the paint has lead unless tests show otherwise.

- Talk to your state or local health department about testing paint and dust from your home for lead.
- Make sure your child does not have access to peeling paint or chewable surfaces painted with leadbased paint.
- Pregnant women and children should not be present in housing built before 1978 that is undergoing renovation. They should not participate in activities that disturb old paint or in cleaning up paint debris after work is completed.
- Create barriers between living/play areas and lead sources. Until environmental clean-up is completed, parents should clean and isolate all sources of lead. They should close and lock doors to keep children away from chipping or peeling paint on walls. You can also apply temporary barriers such as contact paper or duct tape, to cover holes in walls or to block children's access to other sources of lead.
- Regularly wash children's hands and toys. Hands and toys can become contaminated from household dust or exterior soil. Both are known lead sources.
- Regularly wet-mop floors and wet-wipe window components. Because household dust is a major source of lead, parents should wet-mop floors and wet-wipe horizontal surfaces every 2-3 weeks. Windowsills and wells can contain high levels of leaded dust. They should be kept clean. If feasible, windows should be shut to prevent abrasion of painted surfaces or opened from the top sash.
- Prevent children from playing in bare soil; if possible, provide them with sandboxes. Parents should plant grass on areas of bare soil or cover the soil with grass seed, mulch, or wood chips, if possible. Until the bare soil is covered, parents should move play areas away from bare soil and away from the sides of the house. If using a sandbox, parents should also cover the box when not in use to prevent cats from using it as a litter box. That will help protect children from exposure to animal waste.

To further reduce a child's exposure from nonpaint sources:

- Avoid using traditional home remedies and cosmetics that may contain lead.
- Avoid eating candies imported from Mexico.
- Avoid using containers, cookware, or tableware to store or cook foods or liquids that are not shown to be lead-free.
- Use only cold water from the tap for drinking, cooking, and for making baby formula. Hot water is more likely to contain higher levels of lead. Most of the lead in household water usually comes from the plumbing in your house, not from the local water supply.
- Shower and change clothes after finishing a task that involves working with lead-based products such as stained glass work, bullet making, or using a firing range.

If you are concerned that your child may have been exposed to lead, ask your doctor for a blood lead test. This simple test is the ONLY way to know for sure that your child does not have an elevated blood lead level. The Centers for Disease Controland Prevention (CDC) recommends that children ages 6-72 months who live in or frequently visit older buildings, including day care centers, have a blood lead test. Siblings, housemates, visitors, and playmates of children with confirmed lead poisoning may have similar exposures to lead and should be promptly tested. Children may also be exposed to other sources, such as those mentioned above, and should have a blood lead test. Children who have recently moved to the United States should be tested as well.

For more information on sources of lead exposure and prevention tips, please visit our website at www.cdc. gov/nceh/lead or call the National Lead Information Center at 1-800-424-LEAD (5323).

Misha Walker is a Public Health Advisor with the CDC's Lead Poisoning Prevention Program. Currently, she serves as a Project Officer for the states of New Jersey, North Carolina, Mississippi and Oklahoma. She provides technical assistance and guidance to these states as they work to eliminate childhood lead poisoning.

Dr. Brown is Chief of the Lead Poisoning Prevention Branch at the CDC and an Adjunct Professor of Society, Human Development and Health at the Harvard School of Public Health. Dr. Brown received a Doctor of Science degree from the Harvard School of Public Health in 2000.



## Children in Hospitals

By John E. Monaco, MD

## Aaron has Asthma

Aaron is seven years old and his mother knows he has asthma. She has known it since he was

about four, when the hospital sent him home with one of those breathing machines; "nebulizer" was what they called it. As many times as she has seen (or heard) him wheeze and as many times as he has had to go to the hospital, she has never really understood what asthma was. She knew it wasn't an infection really, although every time he got a cold he seemed to start wheezing. Nor was it an allergy, although some doctors have told her that Aaron may well be allergic to something that sets his asthma off from time to time. Why can't they tell me what he's allergic to, she's asked herself more than once. And even more often she's asked herself, "Isn't there a medicine or something that Aaron can take to make the asthma go away?"

Of course, this is an absurd example, yet from time to time I have heard variations on all these questions. The fact is that this disease, asthma, is incredibly common and astoundingly poorly understood, and not just for parents and kids with asthma, but for physicians as well. And because it is so often misunderstood, kids with asthma are subject to two major factors that affect their outcome: delayed recognition of an asthma attack and delayed initiation of treatment.

In our practice, we take care of hospitalized kids with asthma. By definition these kids have "failed" outpatient therapy at home, in the pediatrician's office or in the emergency department. So by the time we see them their symptoms are pretty clear-cut. They often appear anxious and are tired because they have exhibited increased 'work of breathing,' which means that they use abdominal muscles, muscles between their ribs and muscles of the neck, to move air in and out of their lungs, an activity usually handled easily by the diaphragm alone.

With a stethoscope we can hear wheezing, the whistling sound created by air moving at high velocity through a narrowed airway, or decreased breath sounds, which result when the lungs are so "tight" that precious little air is being exchanged. But in the average child, struggling with asthma symptoms on and off at home, the

presentation can be much more subtle, but no less concerning.

Aaron lives on the border between normal respirations and those compromised by an asthma exacerbation. Unpredictably, and sometimes very rapidly, he can move from comfortable breathing into frank respiratory distress. His mother – and this is no criticism of her – sometimes has difficultly recognizing just how sick he is. How can this be?

Let's review the basic issues in asthma. First, a little anatomy: The bronchi and bronchioles (smaller bronchi) are lined by a layer of mucosa (surface tissue) that is made up of cilia and mucus-producing cells, under which is a layer of smooth muscle, and then subcutaneous tissue. There is much more, but this simplification will do for our purposes.

During an asthma attack, something assaults the lungs and causes a multifaceted reaction that involves all these layers. The assaulting agent varies from individual to individual. Some children are clearly allergic to something, like cat hair, or pollen or molds. Some kids start to wheeze when the weather changes, and others are triggered by infections like colds, the flu, etc. Whatever the agent, the process begins in the susceptible child, and depending on the severity, all aspects of airway anatomy become involved. Mucus-producing cells begin doing what they do. Smooth muscle surrounding the airway begins to constrict in a protective mechanism to protect the lungs from whatever they see as the enemy. And the complex inflammatory cascade sets up, creating swelling of the tissues that surrounds the airways. Each one of these processes contributes to narrowing of the normal airway and compromises normal gas exchange. If the symptoms are mild, the child can compensate for all these changes. If severe, respiratory failure can result.

It is in their extraordinary ability to compensate that kids can get into trouble. On one hand, it is their overall young, healthy bodies that protect them, but on the other hand, because they are so young and otherwise healthy, kids can appear to be doing fairly well when they are in fact on the verge of severe respiratory

trouble. This is the case with Aaron. He has only been in the hospital a couple of times, but each time he is admitted the story is the same: His mother says that he has been out playing all day, and when he stops he seems to be breathing a little harder than usual. So she decides to give him a breathing treatment and he improves a little. She wants him to stay inside and rest a little, but he is itching to go back out with his pals. The next time he comes back, he is wheezing more, and working harder to breathe. She gives him another treatment, and once again his symptoms seem relieved. She thinks about taking him to the doctor, but he looks so good that she decides to let him watch a little TV and then sends him to bed. At 2 AM or so, he awakens her, saying he is having trouble breathing. She flips on the light and his expression frightens her. He looks panicked, his lips are a bit bluish and his neck muscles are bulging in an effort to keep his lungs open. She calls EMS and he arrives at the Emergency Room just in time. The ER staff asks her why she waited so long. She promises next time she won't.

I have heard this story hundreds of times over the years. I am not saying you should take your child to the doctor or the ER every time he begins to wheeze, but I am saying we should all give this disease the respect it deserves. It has become the number one hospital-admitting diagnosis for pediatric patients, and its worldwide frequency and mortality is increasing. While experts work on understanding the causes of asthma and develop modalities for prevention and treatment to ease the worldwide epidemic, let us not get complacent with our own children who are struggling with this disease every day. And that goes for ALL of us.

John E. Monaco, M.D., is board certified in both Pediatrics and Pediatric Critical Care. His new book, Moondance to Eternity, is now available. He lives and works in Tampa, Florida. He welcomes your comments, suggestions, and thoughts on his observations.

### What's New on the Website

We are working hard on the website, adding new information all the time. One new section, *Product Recalls*, describes the latest recalls of children's toys and products. We add new information nearly every day.

In the Safety News section you'll find the latest information on potential hazards to your child's health and well being.

Check out the website – www.pedsforparents.com – for all this, parenting articles that are only on the website, and more.

# Infant Carseat Safety UPDATE

Consumer Reports (CR) withdrew its February 2007 issue report that tested infant carseats and found most of them unsafe. After the National Highway Transportation Safety Administration (NHTSA) questioned the actual speed at which the infant carseats were tested in the study, CR rescinded its report and will further test the carseats before reissuing the report. In the original report, CR claimed that the infant carseats were tested in side-impact collisions at 38 mph, but the NHTSA claims that tested impact was closer to 70 mph, not 38 mph as CR claimed. When the NHTSA tested the same model carseats at 38 mph, all the infant carseats remained in their bases and did not fail the side-impact collision tests as dramatically as CR reported.

Consumer Reports and the NHTSA want all consumers to know that they fully advocate the use of infant carseats and do not want the now-confusing results of the CR study to dissuade parents from using infant carseats.

## Cheerleading Dangers

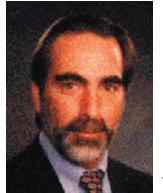
Cheerleading accidents account for more than half the catastrophic sports injuries in female athletes. This astonishing rate is due to greater participation in this sport and an increase in high-risk stunts such as pyramids and tosses.

The American Association of Cheerleading Coaches and Administrators recommends pyramids be only two levels for high school cheerleaders and 2.5 levels in college.

Here's Johns Hopkins pediatrician Dr. Teri McCambridge's checklist for safe cheerleading:

- Is there a separate practice area available?
- Is there sufficient space floor space and ceiling height for the type of stunts being performed?
- Are there enough spotters present for the stunt being performed?
- Are nearby objects properly padded?
- Is there adequate matting?
- Is there adequate lighting?
- Are the cheerleaders practicing and performing on an appropriate flooring surface?
- Are the cheerleaders in appropriate attire (tennis shoes, tight-fighting clothes, no dangly earrings or facial piercings)?

Pediatric News, 11/06



# Perspectives on Parenting By Michael K. Meyerhoff, EdD

## Discussing Drugs

You have decided it is time to talk to your kids about drugs.

What are you going to tell them? Drugs are bad? Don't do drugs? That's it?

Well, that mantra has been the basic approach employed by public service agencies, schools, and many parents for the past couple of decades. And it clearly has not worked very well. Drug abuse is worse than ever among adolescents and young adults in our society and has reached virtually epidemic status. Perhaps that is because the premise that drugs are evil and should be avoided is much too simplistic and fundamentally inaccurate, inappropriate, and downright hypocritical.

The fact is that as human beings we find substances capable of altering our consciousness to be useful and enjoyable. When we employ morphine to cope with post-surgical pain or an aspirin to eliminate a headache, we are taking drugs. When we drink a cup of coffee to get going in the morning or sip a martini to relax at the end of the day, we are taking drugs. And when we puff on a cigarette to calm our nerves or imbibe a glass of champagne to loosen up and celebrate at a wedding reception, we are taking drugs.

Of course, drugs also can be extraordinarily dangerous and can cause serious problems. And we want our kids to be healthy and safe. So what is the sensible and responsible way to talk to them about drugs? What would constitute a truly effective approach?

I wish I could give you a quick and easy answer. But I can't, and neither can anyone else. This is a complicated subject, and addressing it will require all of your intelligence, insight, and creativity. All I can tell you is that if you want to be successful, you will have to do a lot of careful thinking and not leave the job to a little pamphlet that was distributed to your children in health class.

Let's take alcohol for example. Do you really want your kids to go through life without enjoying the benefits of booze? When it comes to chilling out or having fun, a shot of scotch or a bottle of beer can come in quite handy. And as was demonstrated by the failure of

Prohibition back in the 1920s, banishing alcohol from people's lives is impractical if not impossible.

So I also didn't tell my kids not to drink. I didn't even tell them not to drink too much – I figured they would learn that lesson the hard way, just as I did when I suffered through my first horrendous hangover. What I emphasized in the discussion was the capacity of alcohol to suppress one's sense of judgment. And that means one is incapable of judging whether or not one is drunk. Therefore, if imbibing, it is critical not to place oneself in a position where a lack of judgment can be dangerous or disastrous.

I told my children that if they got drunk and then got behind the wheel of a car, they could end up dead. And even worse, they might not die, but they could kill someone else and then have to live with that guilt for the rest of their life. I told them that unwanted pregnancies and the transmission of sexually transmitted diseases often occurred when people got themselves into situations where bad decisions led to unfortunate and even fatal consequences. So, I told them that drinking responsibly is a matter of forethought and planning, not something one does on the fly.

What about marijuana? My kids argued that although society has made weed illegal, from a scientific standpoint, it is no worse – and could even be regarded as considerably less harmful – than alcohol. I didn't argue that point. On the contrary, I acknowledged the validity of the argument, admitted my own marijuana use back in my college days, and told them that if they wanted to campaign for the legalization of pot, they would have my support.

On the other hand, I emphasized that right or wrong, at this point in time, marijuana remains illegal. And that opens up an entire area of other risks. Getting busted for pot gets you a criminal record that will hamper future efforts to get a job, obtain a mortgage, etc. Furthermore, since the sale of marijuana is not sanctioned, it is done outside the protection of the Federal Drug Administration and other agencies that assure legitimacy and safety. You could spend \$50 for a bag of oregano, or you could get a bag of weed that has been laced with PCP

or another more powerful hallucinogen that you may want no part of. Are all these painful and sometimes permanent consequences worth whatever fleeting delight you might get from smoking a joint?

When discussing more "serious" drugs such as crack and smack, I patiently listened to stories about famous people who were known users. For instance, it is no secret that folks from Sigmund Freud to Robin Williams occasionally did cocaine. However, I made sure my kids were aware of other tales like the tragedy of Len Bias. He was a star basketball player at the University of Maryland who became the top draft pick of the Boston Celtics. After his selection, he and his friends decided to celebrate his imminent multi-million dollar contract by snorting some of the stuff. He died from a heart attack instantly after his first inhalation.

In addition, I made sure to thoroughly discuss the topic of addiction. I didn't recite the statistics that 90% of alcoholics started by drinking beer or that 90% of heroin junkies started by smoking marijuana, because the truth is that 90% of beer drinkers don't end up alcoholics and 90% of marijuana smokers don't end up heroin junkies. However, while I didn't say addiction was inevitable, I did point out that it was always a possibility – and that it was an ever-present possibility with prescription painkillers and sleeping pills, and even with milder drugs such as nicotine and caffeine, as well. Consequently, they needed to know the signs that they are heading for serious trouble; and more importantly, they needed to know there is no shame

in getting help before things get out of hand.

Finally, I tried to help them keep drugs in perspective. We live in a drug culture. You can't turn on the TV without seeing an advertisement for some kind of pharmaceutical. Got a problem? Pop a pill. Through discussion, and more emphatically through personal example, I attempted to tell them that under the best of circumstances, drugs are simply a tool or merely a temporary fix. They should not be – and really cannot be – a full and effective alternative to the satisfaction of figuring out how to solve difficulties and achieve happiness on your own.

The bottom line is that I never tried to protect my kids from drugs by promoting abstinence. Instead, I attempted to empower them to make good decisions for themselves by ensuring they had access to solid information and encouraging them to consider all of it carefully.

Was my approach proper? Was it effective? I don't know. But I do know that I can sleep peacefully knowing our discussion about drugs featured honesty, thoughtfulness, and effort rather than the repetition of a simplistic slogan from a poster.

Michael K. Meyerhoff, Ed.D., is executive director of The Epicenter Inc., "The Education for Parenthood Information Center," a family advisory and advocacy agency located in Lindenhurst, Illinois. He may be contacted via e-mail at epicntrinc@aol.com.

## Parents Pack on the Pounds

Having children may not be good for your waistline or your cholesterol level. A review of 1991-1994 data from the National Health and Nutrition Examination Survey III of 6,600 adults, half who lived with children under 17 years old and half who didn't, found that those living with kids ate a daily average of 4.9 grams of fat more than the childless adults. That's the same amount of fat as eating a frozen pepperoni pizza every week.

There are many reasons for this phenomenon. Studies have shown that parents are likely to say their kids select fast foods, snacks, and new breakfast cereals. Half of parents said their grocery selections are influenced by their children.

"This study really points out that we need to focus on the family as a whole, that the entire family needs to eat healthier, the parents and the children," concludes lead researcher Helena Laroche of the University of Iowa's Roy J. and Lucille A. Carver College of Medicine.

She continues, "These dietary choices may be due to

time pressures, advertising aimed at children that also includes adults, or adults' perception that children will eat only hot dogs or macaroni and cheese. Once these foods are in the house, even if bought for the children, adults appear more likely to eat them."

Carver is careful not to make a causal relationship of the fact that adults who live with children tend to eat more fat. She acknowledges that a major limitation of the study was that that relationships between the adults and children in the household were not determined, so that the researchers do not know if parents or other relatives were the primary caregivers. The researchers also did not know the ages of each child in each household, which could also affect the outcome of the research. Older children are more independent eaters and may not have as much effect on their parents'/caregivers' eating habits as younger children.

Journal of the American Board of Family Medicine, 01-02/07

# Use of Infant Seats, Booster Seats, and Seatbelts Prevents Injuries and Saves Lives

By Lisa Chan, MD

Imagine you are late for work. You still have to get the baby to daycare, the toddler to preschool, and the oldest to first grade. You realize the infant and booster seats need to be put into the car. The children often fight you when you place them into their infant seat, booster seat, and seatbelts. Yikes, there is just not enough time and all destinations are within a mile of home. You think, "I know people say to use car seats and seatbelts, but are they really necessary all the time? Do car restraints really make a difference? Is it worth the time and effort to put these unwilling children into their car seats and seatbelts? Maybe just this once I'll put all the kids in the back seat without their car seats and put the baby in the seven year old's lap. No big deal, right?"

#### WRONG!

Car accident is the leading cause of death in children ages 14 years and under. Studies have shown that proper use of infant seats, booster seats, and seatbelts prevents injuries and death. Educational programs have been developed by federal and local agencies with the goal to maximize use of these car safety devices.

Despite public efforts to encourag use of car safety devices, we continue in our emergency department to see children in car accidents who are not properly placed in infant seats, booster seats, or seatbelts. In fact, 24% of children who were in a car accident and who came to our emergency department were not in any car safety device. Emergency Physicians and Medical Examiners see the sad reality of not using infant seats, booster seats, and seatbelts properly. Severe injuries and deaths occur more often in these children than in children properly placed in child safety devices.

My colleagues at University Medical Center and I have studied the effects of not using car safety devices, and the results are heart breaking. Injuries and death were compared between children who were in car safety devices and children who were not. Compared to children who were appropriately placed in car seats and seatbelts, children not in appropriate car seats and seatbelts had to stay in the hospital an average of 20 times longer.

#### We found:

- Internal abdominal organ damage was 20 times more likely in children who were not in appropriate car seats and seatbelts.
- Internal chest organ damage was 13 times more likely in children who were not in appropriate car seats and seatbelts.
- Broken bones were eight times more likely in children who were not in appropriate car seats and seatbelts.
- Need to stay in the hospital was 15 times more likely in children who were not in appropriate car seats and seatbelts.
- Surgery was 13 times more likely in children who were not in appropriate car seats and seatbelts.
- Need for blood transfusion was 28 times more likely in children who were not in appropriate car seats and seatbelts.
- Bleeding in the brain only happened in children who were not in appropriate car seats and seatbelts.
   Children in proper car seats and seatbelts did not have this injury.
- Placement on a breathing machine was only needed in children who were not in appropriate car seats and seatbelts. Children in proper car seats and seatbelts did not need to be placed on a breathing machine.
- The only deaths occurred in children who were not in appropriate car seats and seatbelts. None of the children in proper car seats and seatbelts died.

Our study also revealed that children older than four years old are more likely to be improperly placed in car safety devices than younger children. Although virtually all four to eight year olds should be placed in booster seats, many parents mistakenly believe that it is safe to use only a seatbelt once their child reaches four years old.

Weight	Type of Car Seat	Seat Position
Infants (birth to 1 year) Under 20-22 lbs	Infant-only or rear-facing infant-toddler (convertible)	Rear-facing only
Toddlers (over 1 year) 20-40 lbs	Infant-toddler (convertible)	Forward-facing Harness straps should be at or above shoulderlevel.
Young children (4-8 years) Over 40 lbs, unless 4'9"	Belt-positioning booster seat	Forward-facing Lap belt should fit low and tight across the lap/upper thigh area and the shoulder belt should cross the chest and shoulder.

The NHTSA recommends that all children age 12 years and under should ride in the back seat. Children who are big enough to use only a seatbelt should always use both the shoulder and lap portion of the belt. Using only a lap belt can cause severe internal abdominal organ damage and broken spine.

What you should know:

 Proper use of car safety devices keeps kids safe from serious injury.

- Proper use of car safety devices prevents needless childhood deaths.
- Use the right device for your child's size (see table).
- ALWAYS, ALWAYS... place your child in the proper car safety device.

Dr. Chan is a board certified emergency physician and Associate Professor of Emergency Medicine at the University of Arizona. She has cared for pediatric trauma patients in Level one trauma centers for over 15 years.

## Fluoride Recommendations for Children

In a recent position paper, the American Dental Association made the following fluoride recommendations for children:

Fluoride Toothpaste – Parents and caregivers should ensure that young children use an appropriate-size toothbrush with a small brushing surface and only a pea-sized amount of fluoride toothpaste at each brushing. Young children should always be supervised while brushing and taught to spit out rather than swallow toothpaste. Many children under age six have not fully developed their swallowing reflex and may be more likely to inadvertently swallow fluoride toothpaste. Unless advised to do so by a dentist or other healthcare professional, parents should not use fluoride toothpaste for children less than two years of age.

**Fluoride Mouth Rinse** – Fluoride mouth rinses have been shown to help prevent tooth decay for both children and adults. However, the ADA does not recommend use of fluoride mouth rinses for children under six years of age, unless recommended by a dentist or other health professional. Children under six may be more likely to inadvertently swallow mouth rinse.

**Dietary Fluoride Supplements** – Children should only receive dietary supplemental fluoride tablets or drops as prescribed by their physician or dentist based on the dietary fluoride supplement schedule approved by the ADA, the American Academy of Pediatrics and the American Academy of Pediatric Dentistry. Supplements are not recommended for children under six months of age.

Naturally-Occurring Fluoride in Water – The optimal fluoride level in drinking water is 0.7-1.2 mg/L (or 0.7-1.2 parts per million (ppm)), an amount that has been proven beneficial in reducing tooth decay. Naturally-occurring fluoride may be below or above these levels in some areas. Under the Safe Drinking Water Act, the U.S. Environmental Protection Agency requires notification by the water supplier if the fluoride level exceeds 2.0 ppm. People living in areas where naturally-occurring fluoride levels in drinking water exceed 2.0 ppm should consider an alternative water source or home water treatments to reduce the risk of fluorosis in young children.

American Dental Association, 11/06

## Distracting TV

According to a University of Siena, Italy, study, watching television helps lessen a child's perception of pain. In the study, 69 children seven to twelve years old underwent venipuncture (have blood draw from a vein).

The children were divided into three groups: a control group with no distraction, a group with active, maternal distraction, and a third group with passive, television distraction. Both the mothers and the children scored the child's pain level after the blood drawing.

Of the three groups, the children who watched TV and their mothers rated the child's pain the lowest. The children in the no-distraction group rated their pain the highest, while the mothers of the children in the group with maternal distraction rated their children's pain the highest.

Dr. Bellieni, the lead researcher, concluded that, "TV watching was more effective than active distraction. This was due either to the emotional participation of the mothers in the active procedure or to the distracting power of television."

For whatever reason, watching television, particularly cartoons, can lessen the level of pain children report during venipuncture.

Archives of Diseases in Childhood, 12/06

## **Health Savings News**

#### **FREE** Health Product Samples!

**Get Free** health product samples. **Click now** to get free brand name health samples - and get FREE tips to help you save on prescription drug bills and other medical expenses.

#### Sign up today and receive:

- Our Free HealthSavings Digest e-mail newsletter.
- Free samples of brand name health prodcuts.
- · Coupons to help you save on prescription drugs and other health needs.
- Tips and news to help you save money on prescriptions, health insurance, and othermedical expenses.

Click to Get your Free Health Product Samples Now! www.healthsavingsnews.com

